WILDLIFE SPECIALIST REPORT

Red River AML

Project Location: Nez Perce-Clearwater National Forest, Red River Ranger District, Idaho County. (Boise Meridian): Township 27 North, Range 7 West, SW ¼ Section 19 and Township 28 North, Range 7 West, NE ¼ Section 35.

Project Description: The purpose of the proposed action is the permanent closure of three hazardous mine sites. The need is to eliminate public safety risks associated with two open shafts and one open adit in the Crooked River drainage while maintaining wildlife habitat and the historical integrity of the sites.

Abandoned mine adits and shafts typically contain hazards such as unstable rock and decayed supports, deadly gas and lack of oxygen, explosive and toxic chemicals, hidden vertical drops and the potential for becoming lost in multiple dark tunnels. Shafts pose a particular hazard as they can be easily walked or driven into by unsuspecting forest users who can then be trapped, seriously injured or even killed by what could be a very long fall.

Badger shaft #1 is located immediately adjacent to Forest Road # 311 near the top of Badger Summit at T27N, R8E, SE ¼ of the NW ¼, Section 19. It was previously closed due to a plug of soil and rock at the upper end of the shaft. This collar collapsed two or three years ago, leaving the shaft open to an indeterminate depth. This shaft is a particular hazard because of its proximity to the road. It could be easily walked or driven into by an unsuspecting forest user.

The proposed action is to close this shaft permanently by one of two methods. The first, and easiest, method is to simply plug and fill the top of the shaft by use of an expandable foam plug at the narrowest part of the shaft (some 20' or so below the ground surface), then backfilling the shaft to the surface with available fill material which is available nearby. The second method would be used in the event that a survey found the shaft to be occupied by bat species. This method would entail placing a section of 36"-48" diameter culvert vertically into the shaft with the top end level with or slightly above the ground surface, filling around it with foam at the bottom of the culvert, then by backfilling to the surface with soil and rock. A metal grate sized appropriately for access by bats would then be permanently affixed to the top of the culvert.

This project would be accomplished by the use of a backhoe, dump truck, and associated small hand tools and materials.

Badger shaft #2 is located approximately 275' from Forest Road #311 on Badger Summit at T27N, R8E, NW ¼ of Section 19. There is a short access road that leads from Road #311 to the shaft. The shaft itself is partially collapsed and the remainder is approximately 20' deep. There is a shallow trench that extends from the shaft approximately 60'. The shaft is a safety risk because an ATV could be driven into the area and the opening of the shaft is hard to detect from the top of the adjacent slope.

There is a mound of fill on-site and it is assumed that this material had been removed from the trench and shaft. The fill pile is moderately vegetated and could be used to backfill the shaft and trench although additional material may be needed, which could be hauled from an alternate site. The easiest method of closing this shaft would be to simply use fill material from existing sources to fill the shaft. A small bulldozer could be used to move the material, but a better way would be to use a backhoe or excavator to fill the shaft in lifts or layers so it could be packed down as it is filled. A dump truck would be used to transport material to the site, as needed.

The Miners Ditch Adit is located off of a very steep ATV trail (#807) located about one mile north of the town of Orogrande at T28N, R7E, NW ¼ of the NE ¼, section 35. The trail leads upslope to a relatively flat saddle at roughly 5,000 feet elevation. At this location a small mining ditch crosses the #807 trail and is known as the Miners Ditch Trail #805 (not signed). The #805 trail continues southwest for about 1,800 feet to the adit location. The #805 trail is overgrown and not accessible by ATV. There is also considerable downed wood along the trail.

The open adit is located roughly 20-30 feet below the trail. The adit does not appear to be very deep and is approximately 15-20 feet in length. The adit portal is roughly 6x6 feet. There were no timbers or internal support beams observed.

This trail was surveyed by contractors in 2014 with the thought that it could be a candidate for closure by bat gate. Due to the remote location, limited access, and lack of support timbers, the open adit was considered at the time to be a minimal public safety risk. This site will be evaluated by Forest personnel in the spring of 2017 to determine the level of risk and if a closure is appropriate or not. If it is found to be appropriate, the closure would be done by means of a permanent bat gate across the portal. This closure would be done by building a metal gate in place by cutting and welding steel bar stock in place. Equipment needed would include ATVs and trailers, portable gas powered electric generator, electric cutoff saw, electric welder, steel bar stock and square tubing for constructing the gate, and appropriate hand tools. This equipment would probably need to be either hand carried or transported in a wheelbarrow or other hand powered conveyance for some distance.

These proposals could be accomplished in one of three ways: First, the work would be done by a Forest Service crew who specializes in closing hazardous mine openings with support by Forest personnel and equipment as needed; secondly, the work could be done by contractor; and thirdly, a combination of the above could be utilized. Who the work would be done by is dependent on the timing of the project and the availability of personnel.

Ground disturbance would be minimal; only that required to move and place fill needed to complete the closures. A maximum of ¼ acre would be mildly impacted for all three closures.

Closing the Badger Shaft #1 may require short term (no more than a few hours) blockage of Road #311 while work is ongoing. There will be no change in access restrictions due to any of these activities.

No coordination with other agencies or the public should be required due to the short term of the proposed activities, and due to the fact that none of the activities will occur within an RHCA or other sensitive area. No potential impacts to wildlife are known, with the possible exception of bat species.

No additional permits are known to be required at this time.

Project Timeline: The Red River Ranger District proposes to close three hazardous mine sites during the 2017 field season. Funding has been allocated for these projects and they would be implemented as soon as possible. All three of these projects should easily be completed within a week, once implemented.

Methodology: The Biological Assessment/Evaluation process (FSM 2672.43) ensures that Threatened, Endangered, and Sensitive species (TES) receive full consideration in the decision making process, and assures compliance with the legal, procedural, and biological direction in the Forest Service Manual 2670 and the Nez Perce and Clearwater Forest Plans. TES species are species listed as Proposed to be listed as Threatened or Endangered under the Endangered Species Act and species listed as Sensitive by the U.S. Forest Service, Region 1.

Using available information (e.g., species distributions and habitat requirements, field reconnaissance, previous survey data, vegetation and other GIS data), the Biologist determined which TES species were to be analyzed fir potential effects from the proposed action. Note that Forest Plan Management Indicator Species (MIS) and USFWS Migratory Bird species are included and were analyzed in this Wildlife Specialist using the same approach. A species was not included for analysis (see list below) based on one or more of the following criteria:

1. The species is not known or suspected to occur within the portion of the Forest covered by this project.
2. The species is found in habitat(s) unlike those found in the proposed project area(s).
3. The species was not found during field surveys of the proposed project area, and/or
4. Habitat for the species exists within the proposed project area; however, the species would not be present within the project area during project implementation.

Species dropped from further analysis as a result of one or more of criteria above include:

Status	Species	Exclusion Criteria (see above)
Sensitive	American peregrine falcon (*Falco peregrinus*) Bald Eagle (*Haliaeetus leucocephalus*) Black swift (b) (*Cypseloides niger*) Common Loon (*Gavia immer*) Long-billed Curlew (*Numenius americanus*) Harlequin Duck (*Histrionicus histrionicus*) Mountain Quail *(Oreortyx pictus)* Bighorn Sheep (*Ovis canadensis*) North American wolverine (*Gulo gulo luscus*) Coeur d'Alene salamander (*Plethodon idahoensis*) Ring-necked snake (*Diadophis punctatus*) Western toad (*Anaxyrus boreas*)	2. The species is found in habitat(s) unlike those found in the proposed project area.
MIS	American peregrine falcon[1] (*Falco peregrinus*) Bald eagle[1] (*Haliaeetus leucocephalus*) Bighorn Sheep[1] (*Ovis canadensis*)	2. The species is found in habitat(s) unlike those found in the proposed project area.
	Grizzly bear (*Ursus arctos*)	1. The species is not known or suspected to occur within the portion of the Forest covered by this project.

Migratory Birds	American bittern (b) (*Botaurus lentiginosus)* Bald eagle[1] (y) (*Haliaeetus leucocephalus*) Black Rosy-finch (y) (*Leucosticte atrata*) Black swift[1] (b) (*Cypseloides niger*) Brewer's sparrow (b) (*Spizella breweri*) Burrowing owl (b) (*Athene cunicularia*) Eared grebe (b) (*Podiceps nigricollis*) Fox sparrow (b) (*Passerella liaca*) Golden eagle (y) (*Aquila chrysaetos*) Grasshopper sparrow (b) (*Ammodramus savannarum*) Lewis's woodpecker (b) (*Melanerpes lewis*) Long-billed curlew (b) (*Numenius americanus*) Peregrine falcon (b) (*Falco peregrinus*) Short-eared owl (y) (*Asio flammeus*) Swainson's hawk (b) (*Buteo swainsoni*) Western grebe (b) (*Aechmophorus occidentalis*) White-headed woodpecker (y) *(Picoides albolarvatus*) Williamson's sapsucker (b) (*Sphyrapicus thyroideus*) Willow flycatcher (b) (*Empidonax traillii*)	2. The species is found in habitat(s) unlike those found in the proposed project area.

[1]Also a Sensitive Species

Species Considered in Detail

Issue Indicators: The effect on species and their potential habitat, measured in acres, is the primary indicator used in the analysis. For species without modeled habitat, a qualitative discussion of habitat conditions and effects is the indicator used in the analysis.

Threatened, Endangered, and Proposed Species:
Issue Indicator for all species: determination statement.

Sensitive Species:
Issue Indicator for species with modeled habitats: amount of available habitats.
Issue Indicator for species without modeled habitats: qualitative discussion of habitat trend.

Issue Indicator for all species: determination statement.

Management Indicator Species:
Issue Indicator for elk: summer habitat effectiveness.
Issue Indicator for all big game and furbearer species: refer to Wildlife Security indicator.
Issue Indicator for species with modeled habitats: amount of available habitats.
Issue Indicator for species without modeled habitats: qualitative discussion of habitat trend.

Migratory Birds:
Issue Indicator for species with modeled habitats: amount of available habitats.
Issue Indicator for species without modeled habitats: qualitative discussion of habitat trend.

Direct and Indirect Effects: Direct and indirect effects vary by species depending upon the species home range size, mobility, and habitat requirements; habitat availability; habitat quality; and predetermined analysis units (if designated). Unless otherwise noted the analysis area for direct and indirect effects coincides with the project location and the area adjacent to the project location out to ¼ mile.

The direct and indirect effects boundary for lynx is the lynx analysis units.
The direct and indirect effects boundary for elk is the Forest Plan elk habitat analysis units.

Cumulative Effects: Cumulative impacts to wildlife populations and habitats are addressed through consideration of past, present, and reasonably foreseeable actions. Examples include road and trail construction and use, timber harvest, natural and prescribed fire, livestock grazing, mining, and recreational uses. The results of past projects contribute to the current existing condition, which can be used to discuss effects of proposed activities on wildlife species.

Analysis of Consideration of Cumulative Effects: Unless otherwise noted the area considered for cumulative effects coincides with and includes the project location and an area adjacent to the project location out to ¼ mile. This boundary was chosen based on the localized nature, scope, and scale of the project's activities and expected effects on wildlife and habitat.

The cumulative effects boundary for lynx is the Lynx Analysis Units.
The cumulative effects boundary for elk is the Forest Plan Elk Habitat Analysis Area.
The cumulative effects area for bats is Forestwide.

Timeframe to Determination of Cumulative Effects: Based on the short duration of the proposed project's activities (one day) and the expected impacts, the timeframe for the determination of cumulative effects, unless noted differently elsewhere, is one week past and future of actual on-site activity.

Affected Environment:

The following tables display those federal Endangered, Threatened and Proposed species and Migratory Bird Species as identified by U.S. Fish and Wildlife Service through the Information for Planning and Conservation (IPaC) site, being analyzed for effects (Tables A and D). Tables B and C include Region 1 Sensitive Species and Forest Plan Management Indicator Species, respectively, on the Nez Perce-Clearwater National Forest that were evaluated for potential effects from the proposed project.

WILDLIFE

A. Threatened, Endangered, and Proposed Species (list accessed from USFWS on 05/21/2016)

Species	*Suitable habitat in project area?*	*Effect on habitat?*	*Species present in area during season of project?*	*Determination*	*Comments*
Canada lynx (*Lynx canadensis*) Threatened	No	No	No	NE	**Direct and Indirect Effects:** The project does falls within LAU 3050401. Vegetative conditions in this portion of the forest represents small disconnected patches of potential habitat. There is no lynx habitat in the immediate vicinity of the miners Ditch Adit site while Badger Shaft #1 and #2 fall within lynx habitat. The project would not impact suitable lynx habitat however project related disturbance (noise, vehicles/equipment, human presence) could cause an individual lynx to avoid the area during implementation. This level of disturbance would be considered minor given the short duration of activity at any individual site. **Cumulative Effects:** There are no other projects within the cumulative effects area which overlap spatially or temporally with this proposed project. As a result there would be no cumulative effects related to disturbance from this project. **Synopsis of Effects:** In the unlikely event there would be a lynx moving through the project area at the time of operations project related disturbance such as equipment operation, noise, and human presence may cause them to temporarily avoid the area. The effects of this type of activity have been analyzed as part of the 2014 Programmatic Biological Assessment (BA) For Activities That Are Not Likely To Adversely Affect Canada Lynx, Grizzly Bear, or Canada Lynx Critical Habitat as Hardrock Mining and Gravel Pits including quarries, recreational mining, small mines, exploratory drilling and reclamation of small mines.
North American wolverine[1] (*Gulo gulo luscus*) Proposed	No	No	No	No Jeopardy	**Direct and Indirect Effects:** The project does not fall within or impact suitable wolverine habitat so there would be no direct or indirect effects to wolverine as a result of this project. **Cumulative Effects:** There are no direct or indirect effects. As a result there can be no cumulative effects related to wolverine associated with this project.

					Synopsis of Effects: There are no direct, indirect, or cumulative effects to wolverine or wolverine habitat as a result of this project.

NE = "No effect"; NLAA = "Not likely to adversely affect"; LAA = "Likely to adversely affect"; BE=Beneficial effects
[1]Also a Sensitive Species

B. Sensitive Species

Species	*Suitable habitat in project area?*	*Effect on habitat?*	*Species present in area during season of project?*	*Determination*				*Comments*
				NI	*MIIH*	*LI*	*BI*	
North American wolverine[1] (*Gulo gulo luscus*)	--	--	--	--	--	--	--	See Threatened and Endangered Species analysis in Table A.
Black-backed woodpecker (*Picoides arcticus*) Flammulated owl (*Psiloscops flammeolus*) Pygmy nuthatch (*Sitta pygmaea*) White-headed woodpecker (y) *(Picoides albolarvatus*) Fisher (*Martes pennanti*) Gray wolf (*Canis lupus*)	Yes	No	Yes		X			**Direct and Indirect Effects:** There are no anticipated impacts to R1 Sensitive Species habitats as a result of this project. The proposed project activity could cause temporary disturbance or avoidance during implementation however it is expected that actual on-site time to conduct individual mine closures would be one week and thereby represents a negligible level of disturbance. **Cumulative Effects:** Based on consideration of past, present, and reasonably foreseeable actions, and the timeframe for implementation it is expected that disturbance related to this abandoned mine closures would produce a negligible cumulative effects related to disturbance (human presence, noise, equipment operation, etc.). **Synopsis of Effects:** There would be no loss of R1 Sensitive species habitat as a result of this project. Project-based disturbance related to individual mine closures is expected to last only one week and, when considered cumulatively with the impacts of other past and present projects as well as those within the reasonably foreseeable future, would not represent a discernable cumulative impact.
Fringed myotis (*Myotis thysanodes*) Long-eared myotis (*Myotis evotis*) Long-legged myotis	Yes	Yes	Yes		X			**Direct and Indirect Effects:** Fringed myotis use mines as daytime roosts. Long-eared, long-legged myotis use mines as hibernacula and Townsend's big-eared bats use mines as hibernacula and maternity roosts. While there is no specific information available regarding bats use of these mines

Species	Suitable habitat in project area?	Effect on habitat?	Species present in area during season of project?	Determination				Comments
				NI	MIIH	LI	BI	
(*Myotis volans*)Townsend's big-eared bat (*Corynorhinus townsendii*)								complete mine closures could potentially eliminate roosting, maternity, and hibernating habitat. Installation of bat gates which allow for public safety and bat use would eliminate the direct effects to potential bat use. **Cumulative Effects:** Complete closure of the mine shafts could eliminate potential bat habitat. While considered a minor effect this project would contribute cumulatively to the effects to other losses of bat roosting, maternity, and hibernating habitat across the Forest. The cumulative effects related to this project would be avoided through installation of bat gates which allow for public safety and bat use. **Synopsis of Effects:** There could be a loss of bat habitat as a result of this project. This loss of habitat would result in a minor, though cumulative, impact when considered with other losses of habitat across the Forest. The best option would include installation of bat gates which allow for public safety and bat use. This would eliminate the direct, indirect, and cumulative effects to potential bat hibernacula.
NI = "No impact"; MIIH = "May adversely impact individuals or habitat, but not likely to result in a loss of viability on the planning area, nor cause a trend to federal listing or a loss of species viability range wide"; LI = "Likely to result in a loss of viability on the planning area, in a trend to federal listing, or in a loss of species viability range wide"; BI="Beneficial impact"								

C. Management Indicator Species

Species	Suitable habitat in project area?	Effect on habitat?	Biological Determination
Gray wolf[1] (*Canis lupus*)	--	--	See Gray Wolf in Sensitive Species analysis in Table B.
Northern goshawk (*Accipiter gentilis*) Pileated woodpecker (*Dryocopus pileatus*) American marten (*Martes americana*) Rocky mountain elk	Yes	No	**Direct and Indirect Effects:** There are no anticipated direct negative impacts to old growth, riparian, elk habitat effectiveness, or other habitat parameters for which Management Indicator Species are representative as a result of this abandoned mine closures. The proposed activity could cause temporary disturbance or avoidance during implementation however it is expected that actual time to complete the individual mine closures will only take one week thereby represents a negligible level of disturbance.

Species	*Suitable habitat in project area?*	*Effect on habitat?*	*Biological Determination*
(*Cervus elaphus*) Shiras Moose (*Alces alces shirasi*)			**Cumulative Effects** Based on consideration of past, present, and reasonably foreseeable actions, and the timeframe for implementation it is expected that disturbance related to this abandoned mine closures would produce negligible cumulative effects related to disturbance (human presence, noise, equipment operation, etc.). **Synopsis of Effects:** There would be no alteration of old growth, riparian, elk habitat effectiveness, or other habitat parameters for which Management Indicator Species are considered representative. Project-based disturbance related to individual mine closures are expected to last only week day and, when considered cumulatively with the impacts of other past and present projects as well as those within the reasonably foreseeable future, would not represent a discernable cumulative impact.
[1]Also a Sensitive Species			

D. Fish and Wildlife Service Migratory Birds (list accessed from USFWS on 05/21/2016)

Species	*Suitable habitat in project area?*	*Effect on habitat?*	*Species present in area during season of project?*	*Comments*
Flammulated owl[1] (b) (*Psiloscops flammeolus*)	--	--	--	See Sensitive Species analysis in Table B.
Calliope hummingbird (b) (*Selasphorus calliope*) Cassin's finch (y) (*Carpodacus cassinii*) Olive-sided flycatcher (b) (*Contopus cooperi*) Rufous hummingbird (b) (*Selasphorus rufus*)	Yes	No	Yes	**Direct and Indirect Effects:** There are no anticipated impacts to migratory bird habitats as a result of this project. The proposed project activity could cause temporary disturbance or avoidance during implementation however it is expected that actual on-site time to conduct mine closure would be one week and thereby represents a negligible level of disturbance. **Cumulative Effects:** Based on consideration of past, present, and reasonably foreseeable actions, and the timeframe for implementation it is expected that disturbance related to this abandoned mine closures would produce negligible cumulative effects related to disturbance (human presence, noise, equipment operation, etc.). **Synopsis of Effects:** There would be no loss of R1 Sensitive species habitat as a result of this project. Project-based disturbance related to individual mine closures is expected to last only one week and, when considered cumulatively with the impacts of other past and present projects as well as those within the reasonably foreseeable future, would not represent a discernable cumulative impact.
[1]Also a Sensitive Species				

Suggested mitigation to be included as part of the project design: Installation of bat gates would eliminate loss of potential bat habitat versus the complete closure of the mine shafts.

Prepared by:

SIGNATURE: /S/ James Lutes **DATE:** May 13, 2017

TITLE: Forest Wildlife Biologist, Nez Perce-Clearwater National Forest